

**APPENDIX**  
**CLAIMS ON APPEAL**

22. An isolated DNA segment encoding a mammalian GDF-1 protein having the amino acid sequence defined in an open reading frame of Figure 2 or Figure 11A or Figure 11B.

3. The DNA segment according to claim 22 wherein said mammal is a mouse, or human.

11. A recombinant DNA molecule comprising:

- i) said DNA segment according to claim 22, operably linked to
- ii) a vector.

12. A host cell stably transformed with said recombinant DNA molecule according to claim 11.

13. The host cell according to claim 12 wherein said cell is a procaryotic cell.

14. The host cell according to claim 12 wherein said cell is a eucaryotic cell.

15. A method of producing a recombinant GDF-1 protein comprising culturing the host cell of claim 12 under conditions such that said GDF-1 protein is produced, and isolating said GDF-1 protein.

24. An isolated DNA segment encoding a mammalian GDF-1 protein comprising a nucleotide sequence as defined in an open reading frame of Figure 2 or Figure 11A or Figure 11B.

26. A recombinant DNA molecule comprising the isolated DNA segment according to claim 24 operably linked to a vector.
27. A host cell stably transformed with the recombinant DNA molecule according to claim 26.
28. The host cell according to claim 27 wherein said cell is a procaryotic cell.
29. The host cell according to claim 27 wherein said cell is a eucaryotic cell.
30. A method of producing a recombinant GDF-1 protein comprising culturing the host cell according to claim 27 under conditions such that the GDF-1 protein is produced, and isolating the GDF-1 protein.
31. An isolated DNA segment encoding a mammalian GDF-1 protein which hybridizes to the nucleotide sequence defined in Figure 2 under conditions of 68°C and 1M sodium chloride and which remains bound when subjected to washing at 68°C with 15 mM sodium chloride/1.5 mM sodium citrate.
32. A recombinant DNA molecule comprising the isolated DNA segment according to claim 31 operably linked to a vector.
33. A host cell stably transformed with the recombinant DNA molecule according to claim 32.
34. A method of producing a recombinant GDF-1 protein comprising culturing the host cell according to claim 33 under conditions such that the GDF-1 protein is produced, and isolating the GDF-1 protein.

35. An isolated DNA segment encoding a mammalian GDF-1 protein, wherein said DNA segment consists essentially of the open reading frame for GDF-1 as shown in Figure 2 or Figure 11A or Figure 11B.

36. A recombinant DNA molecule comprising the isolated DNA segment according to claim 35 operably linked to a vector.

37. A host cell stably transformed with the recombinant DNA molecule according to claim 36.

38. A method of producing a recombinant GDF-1 protein comprising culturing the host cell according to claim 37 under conditions such that the GDF-1 protein is produced, and isolating the GDF-1 protein.

39. An isolated DNA segment encoding a mammalian GDF-1 protein, wherein said DNA hybridizes under conditions of 65°C and 1M sodium chloride to DNA having the nucleotide sequence as defined in Figure 2 or Figure 11A or 11B and remains bound when subjected to washing at 68°C and 0.3 M sodium chloride/ 30 mM sodium citrate (2X SSC).

40. A recombinant DNA molecule comprising the isolated DNA segment according to claim 39 operably linked to a vector.

41. A host cell stably transformed with the recombinant DNA molecule according to claim 40.

42. A method of producing a recombinant GDF-1 protein comprising culturing the host cell according to claim 41 under conditions such that the GDF-1 protein is produced, and isolating the GDF-1 protein.